

25X1

May 12, 1960

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ATTENTION:

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Gentlemen:

Subject: Our Proposal No. 802074G

In accordance with our discussion of today, we are quoting you on two antenna systems as per the enclosed sketches.

Antenna system, C-1313, will consist of a telescoping aluminum tower approximately 52' high when fully extended. Protruding from the top of this tower is a mast to which antennas will be mounted. This mast will be rotatable in its bearing in the top section of the mast so that the top antenna can be located in any compass direction. An indicator dial will be located on top of the tower to determine angular position.

The top antenna array will be of the type Y102-F tuned for 115 ± 1 mc. This antenna can be stacked either horizontally or vertically depending on the erection choice. Coaxial harness connect the antennas together in pairs and then joined to a common output. 30' of RG-9/U or equivalent transmission line terminated in type 'N' connector completes antenna unit.

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Below the top unit spaced approximately 5' will be a second set of four antennas, #Y101-C, tuned for 94 ± 1 mc. These antennas may be installed either horizontally or vertically polarized. Suitable harness connects same as above and will be terminated at the base of tower with type "N" connector.

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This lower bay may be turned on the mast independent of top bay so that the second antenna can point in different directions. A dial indicator will determine compass setting or deviation from top bay.

This antenna system, its guyed tower and hardware is designed to withstand winds of 70 knots velocity with $\frac{1}{2}$ ' iceloading. Guy anchors will not be furnished as it is determined that a concrete guy anchor will be required due to soil conditions.

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This C-1313 antenna system will be erected at Sherburne, New York for tests and we will notify you so you can be present when erection takes place. We will run patterns on the antenna arrays but not mounted on the tower. The array tests will be run at our test site in Earlville, New York. (See facility booklet enclosed).

A suitable instruction manual showing photographs or drawings of system and proposed method of doing the installation will be furnished.

The C-1313 antenna in accordance with this design will cost \$7500.00.

The second antenna is a modification of the antenna in our Proposal #1346G and will be known as E-1249A tower and yagi antenna system.

This antenna consists of telescoping tower approximately 52' high from which extends a mast mounted on a rotating mechanism. The rotating mechanism which will be AC operated for minimum RF interference will have a speed 1 to 1 1/2 rpm and will operate from 110-115 volts AC, 60 cycles. Rotation of $\pm 180^\circ$ is provided with limit switches to prevent overrun.

From this positioner will extend a mast with horizontal booms for mounting four antennas, either vertically or horizontally polarized. The antennas to be furnished with this system are Y101-(60-70 mc). These antennas can be mounted either horizontally or vertically.

The transmission line, RG-9/U, is furnished from the antenna to the base of the tower, cable terminated in type 'N' connector.

With the rotator is furnished a control lead 300' long from the rotator to the control panel located in your system. This control panel will be rack mounted type 8 3/4 x 19" panel equipped with 1:1 indicator and control switches for forward and reverse as well as on and off. Pilot light indicates when power is on.

The sketches furnished with Proposal #1346G indicates the method of mounting for the higher frequency bands and this system is suitable for attachment of antennas up to 300 mc.

The antenna will be erected at and you will be advised so you can witness the erection. Patterns will be run on the yagi antennas.

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Time does not permit a more detailed analysis of these two systems but a more detailed proposal will be furnished in the next few days.

Price on the E-1249A including positioner, cable, etc. is \$10,950.00 each.

Our prices are subject to our standard terms of 25.20 days, net 30 days. Point of delivery is f.o.b. Sherburne, New York.

Very truly yours,

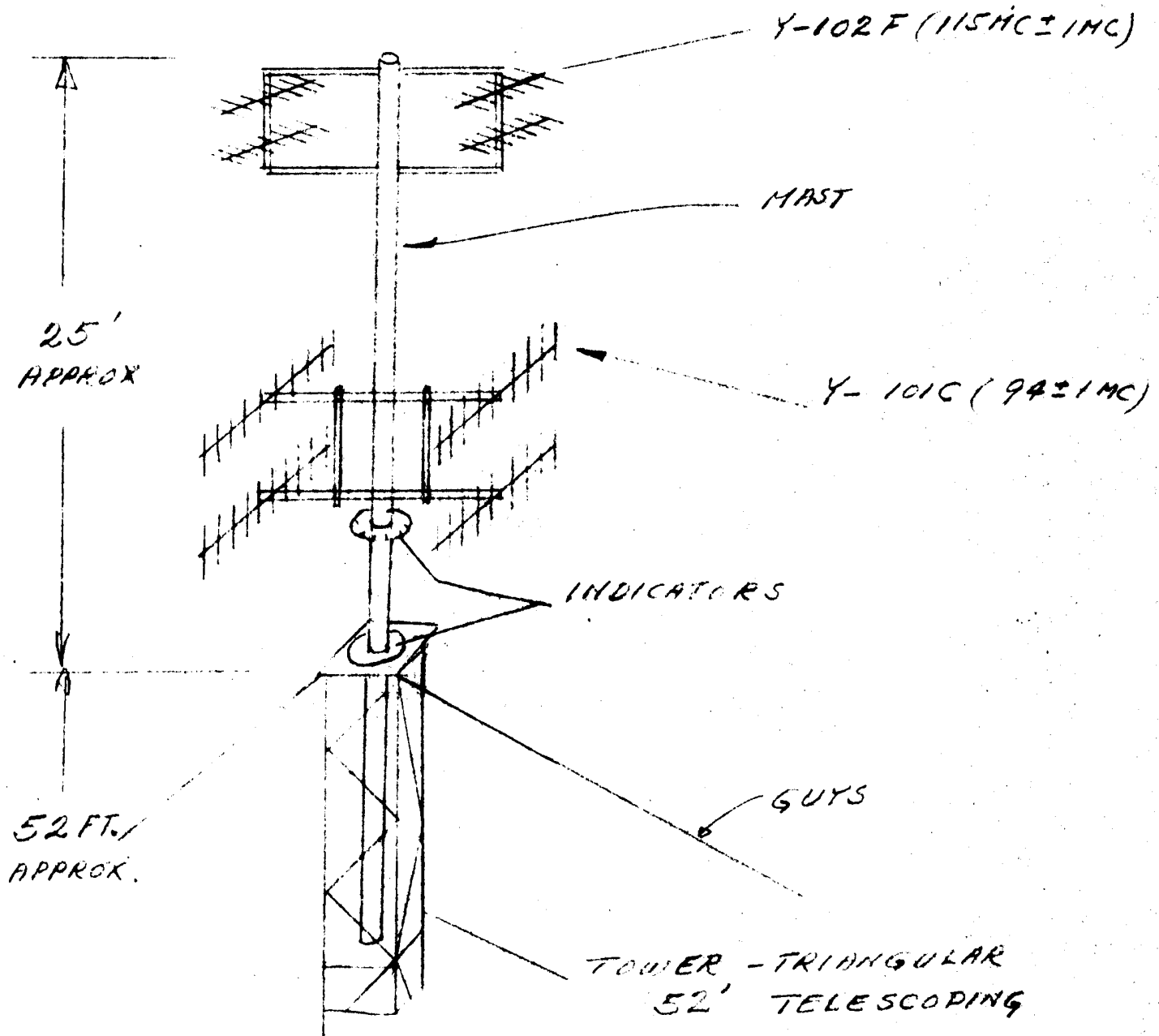
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Executive Vice President

TL:lh

Enc.

| | | | |
|---------------|-----------------------------|--------------|----------------|
| DATE: 5-12-60 | | JOB SHEET | 25X1 C-1313 |
| ENG: T.L. | TITLE: TOWER & YAGI ANTENNA | | |



SAFE LOAD 70 KNOTS WITH 1/4" ICE

CABLE RG-9/U - TYPE N OUTPUT
CONTROL CABLE - APPROX 300'

| | | | |
|--------------------|--|-------|--------|
| DATE: 9/17/59 | | JOB | 25X1 |
| ENG: J. J. 5-12-60 | TITLE: E-1249A TOWER & YAGI ANTENNA SYSTEM | SHEET | 4 of 7 |

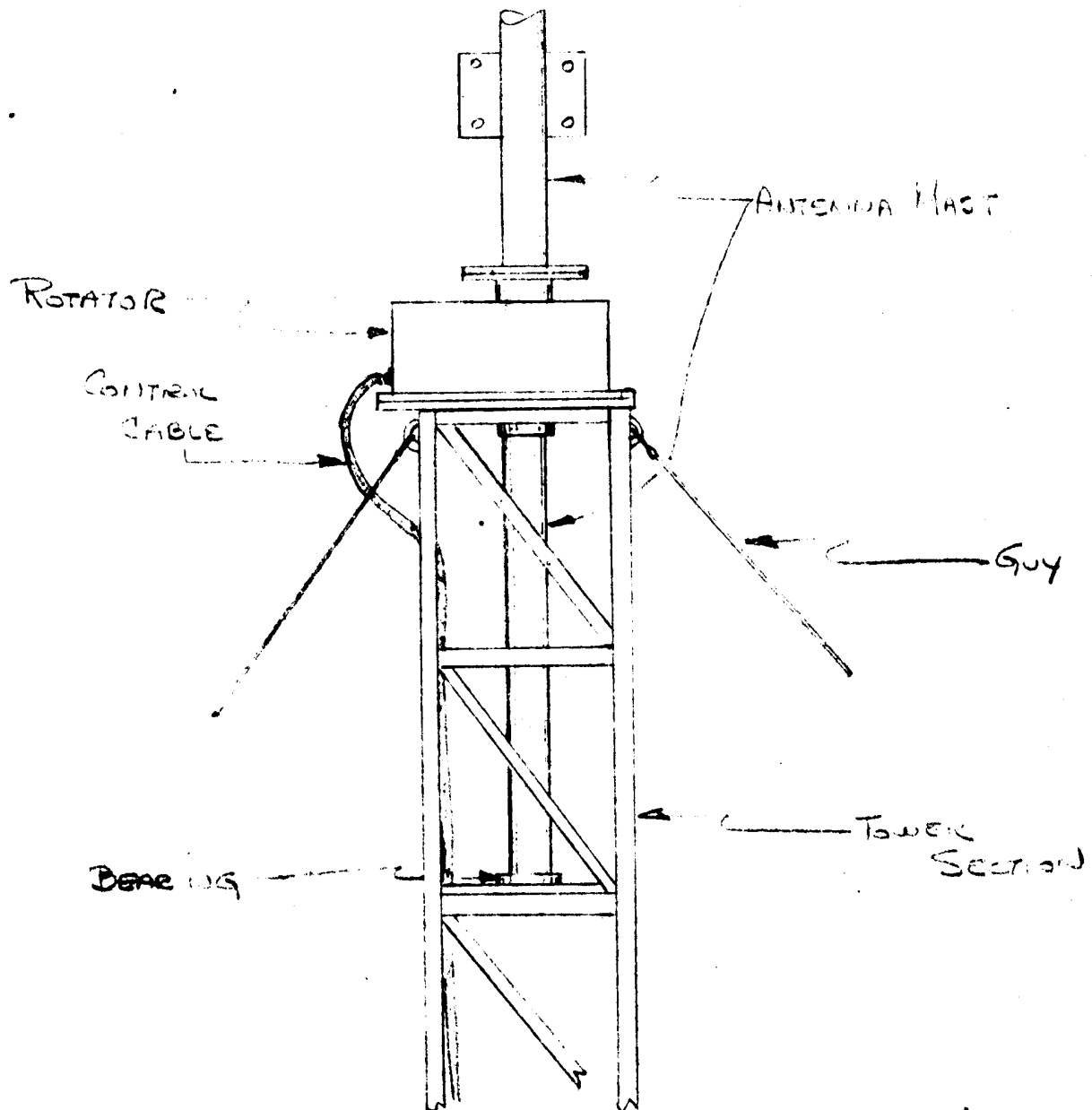


Fig. II

| | | | |
|------------------|--|-------|--------|
| DATE: 9/17/59 | | JOB | 25X1 |
| ENG: JWE 5-12-60 | TITLE: E-1249A TOWER & YAGI ANTENNA SYSTEM | SHEET | 6 of 7 |

CONFIDENTIALHORIZONTAL POLARIZED

40MC THRU 60MC

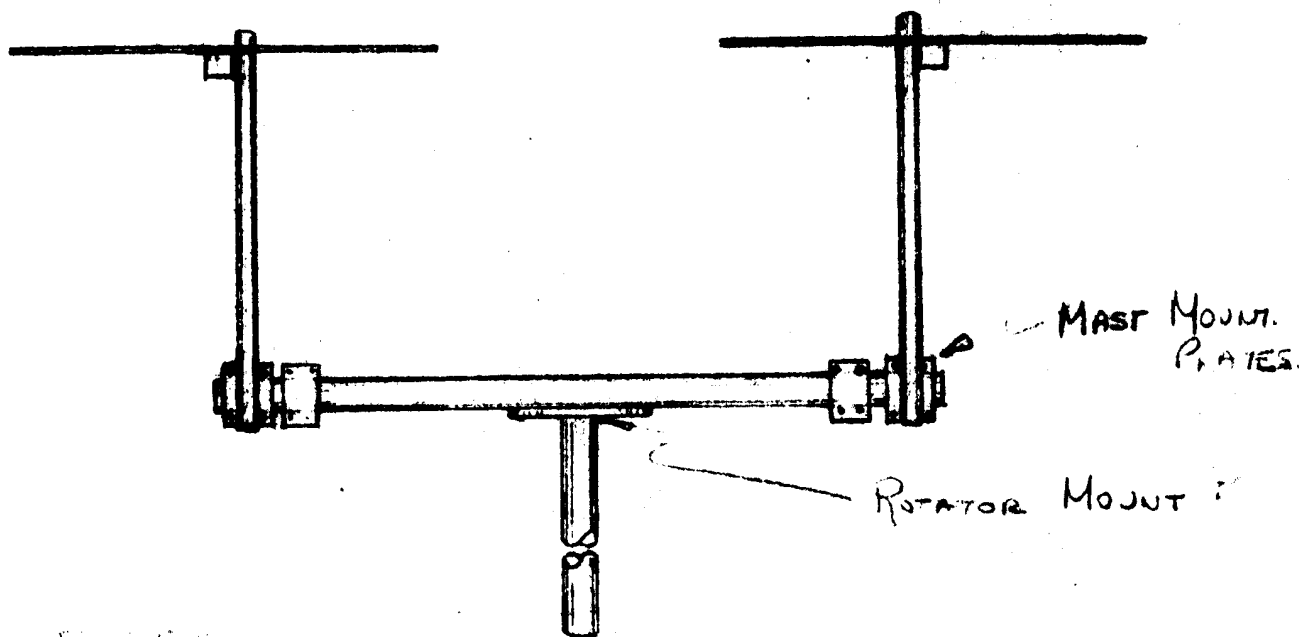


FIG. II

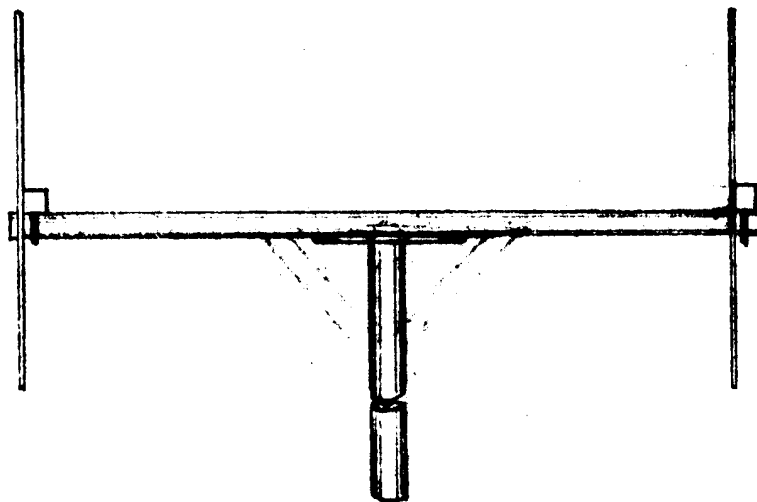
VERTICAL POLARIZED

FIG. III

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| | | |
|-----------------|---|------------------|
| DATE: 9/17/59 | | JOB SHEET 7 of 7 |
| ENG: JWK 5-12-4 | TITLE: E-1249 TOWER & YAGI ANTENNA SYSTEM | |

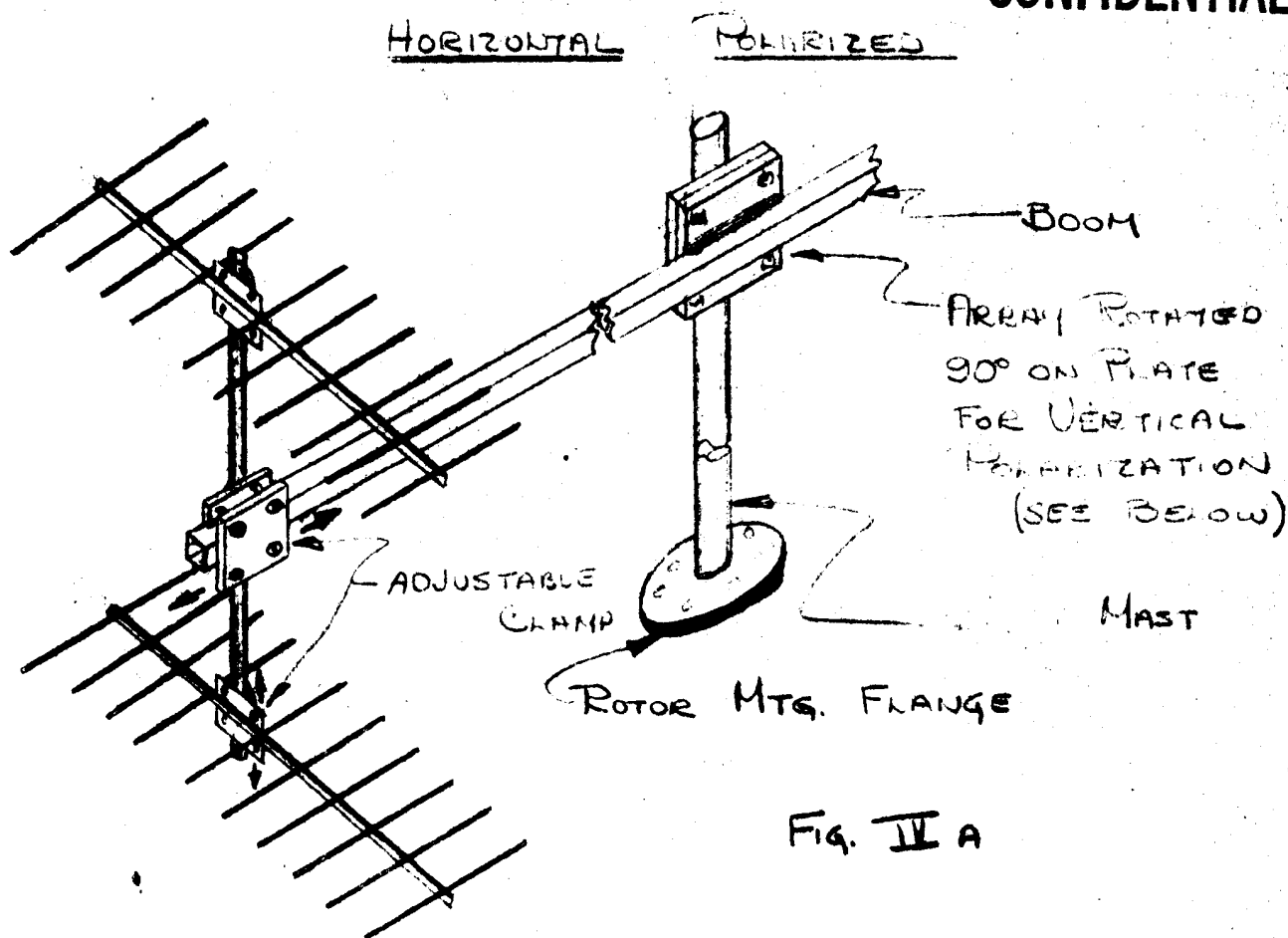
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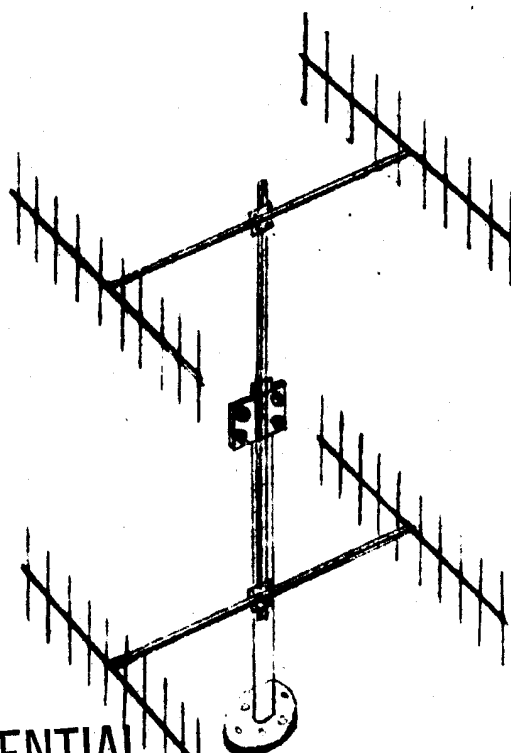
FIG. IV A

VERTICAL POLARIZED

60MC THRU 108 MC WILL USE
2X3 RECTANGULAR BOOM

108 MC THRU 305 MC WILL USE
3X2 SQUARE BOOM

MAST HAS (2) MOUNTING PLATES
TO ALLOW FOR ELECTRICAL &
MECHANICAL CLEARANCE.

FIG IV **CONFIDENTIAL**